

Shengwang Du

List of Publications by Year in descending order

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Version: 2024-02-01

129
papers

4,367
citations

94433

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114465

63
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153
all docs

153
docs citations

153
times ranked

3842
citing authors

| # | ARTICLE | IF | CITATIONS |
|----|---|------|-----------|
| 1 | Optical neural network quantum state tomography. Advanced Photonics, 2022, 4, . | 11.8 | 5 |
| 2 | Quantum Squeezing and Sensing with Pseudo-Anti-Parity-Time Symmetry. Physical Review Letters, 2022, 128, 173602. | 7.8 | 14 |
| 3 | Wavelength conversion for single-photon polarization qubits through continuous-variable quantum teleportation. Physical Review A, 2022, 105, . | 2.5 | 0 |
| 4 | Tailor-made unitary operations using dielectric metasurfaces. Optics Express, 2021, 29, 5677. | 3.4 | 4 |
| 5 | Scalability of All-Optical Neural Networks Based on Spatial Light Modulators. Physical Review Applied, 2021, 15, . | 3.8 | 14 |
| 6 | One-sided destructive quantum interference from an exceptional-point-based metasurface. Physical Review A, 2021, 104, . | 2.5 | 8 |
| 7 | Hybrid Entanglement between Optical Discrete Polarizations and Continuous Quadrature Variables. Photonics, 2021, 8, 552. | 2.0 | 4 |
| 8 | Dual beam-shear differential interference microscopy for full-field surface deformation gradient characterization. Journal of the Mechanics and Physics of Solids, 2020, 145, 104162. | 4.8 | 6 |
| 9 | Efficient production of a narrow-line erbium magneto-optical trap with two-stage slowing. Physical Review A, 2020, 102, . | 2.5 | 14 |
| 10 | Einstein-Podolsky-Rosen Energy-Time Entanglement of Narrow-Band Biphotons. Physical Review Letters, 2020, 124, 010509. | 7.8 | 17 |
| 11 | Anti-Parity-Time Symmetric Optical Four-Wave Mixing in Cold Atoms. Physical Review Letters, 2019, 123, 193604. | 7.8 | 65 |
| 12 | $\hat{\Gamma}$ -Quench Measurement of a Pure Quantum-State Wave Function. Physical Review Letters, 2019, 123, 190402. | 7.8 | 13 |
| 13 | Visualization of Protein Sorting at the Trans-Golgi Network and Endosomes Through Super-Resolution Imaging. Frontiers in Cell and Developmental Biology, 2019, 7, 181. | 3.7 | 24 |
| 14 | Light sheets with extended length. Optics Communications, 2019, 450, 166-171. | 2.1 | 1 |
| 15 | Efficient quantum memory for single-photon polarization qubits. Nature Photonics, 2019, 13, 346-351. | 31.4 | 183 |
| 16 | Measuring optical beam shear angle of polarizing prisms beyond the diffraction limit with localization method. Optics Communications, 2019, 435, 227-231. | 2.1 | 3 |
| 17 | RIM and RIM-BP Form Presynaptic Active-Zone-like Condensates via Phase Separation. Molecular Cell, 2019, 73, 971-984.e5. | 9.7 | 166 |
| 18 | Intracavity cold atomic ensemble with high optical depth. Review of Scientific Instruments, 2019, 90, 013105. | 1.3 | 10 |

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|----|---|-----|-----------|
| 19 | Quantitative surface topography of martensitic microstructure by differential interference contrast microscopy. Journal of the Mechanics and Physics of Solids, 2019, 124, 102-114. | 4.8 | 6 |
| 20 | Proposed narrowband biphoton generation from an ensemble of solid-state quantum emitters. Journal of the Optical Society of America B: Optical Physics, 2019, 36, 646. | 2.1 | 5 |
| 21 | All-optical neural network with nonlinear activation functions. Optica, 2019, 6, 1132. | 9.3 | 222 |
| 22 | Configurable Beam Splitting of Single Photon in Cold Atoms. , 2019, , . | | 0 |
| 23 | Non-Hermitian Nonlinear Optics without Gain and Loss. , 2019, , . | | 0 |
| 24 | Efficiently Loading Cold Atomic Ensemble into an Optical Cavity with High Optical Depth. , 2019, , . | | 0 |
| 25 | An integrated single- and two-photon non-diffracting light-sheet microscope. Review of Scientific Instruments, 2018, 89, 043701. | 1.3 | 4 |
| 26 | ATM and ATR play complementary roles in the behavior of excitatory and inhibitory vesicle populations. Proceedings of the National Academy of Sciences of the United States of America, 2018, 115, E292-E301. | 7.1 | 58 |
| 27 | TEFM Enhances Transcription Elongation by Modifying mtRNAP Pausing Dynamics. Biophysical Journal, 2018, 115, 2295-2300. | 0.5 | 9 |
| 28 | Development of in Planta Chemical Cross-Linking-Based Quantitative Interactomics in <i>Arabidopsis</i> . Journal of Proteome Research, 2018, 17, 3195-3213. | 3.7 | 20 |
| 29 | Impairment of Inhibitory Synapse Formation and Motor Behavior in Mice Lacking the NL2 Binding Partner LHFPL4/GARLH4. Cell Reports, 2018, 23, 1691-1705. | 6.4 | 29 |
| 30 | Single photon at a configurable quantum-memory-based beam splitter. Physical Review A, 2018, 97, . | 2.5 | 7 |
| 31 | Engineering Narrowband Biphotons. , 2018, , . | | 0 |
| 32 | Bright narrowband biphoton generation from a hot rubidium atomic vapor cell. Applied Physics Letters, 2017, 110, 161101. | 3.3 | 31 |
| 33 | GAS2L1 Is a Centriole-Associated Protein Required for Centrosome Dynamics and Disjunction. Developmental Cell, 2017, 40, 81-94. | 7.0 | 31 |
| 34 | Mirrorless Optical Parametric Oscillation with Tunable Threshold in Cold Atoms. Physical Review Letters, 2017, 119, 150406. | 7.8 | 7 |
| 35 | Cdk5-dependent phosphorylation of liprin β 1 mediates neuronal activity-dependent synapse development. Proceedings of the National Academy of Sciences of the United States of America, 2017, 114, E6992-E7001. | 7.1 | 45 |
| 36 | Quantum Heat Engine Using Electromagnetically Induced Transparency. Physical Review Letters, 2017, 119, 050602. | 7.8 | 64 |

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|----|---|------|-----------|
| 37 | Testing the Bell inequality on frequency-bin entangled photon pairs using time-resolved detection. Optica, 2017, 4, 388. | 9.3 | 35 |
| 38 | Generation of frequency-bin entangled narrowband biphotons and their Bell test. , 2017, , . | | 0 |
| 39 | Entangling Narrowband Photon Pairs. , 2017, , . | | 0 |
| 40 | Enhanced spectral brightness of narrowband photon pair generation from a hot atomic vapor cell. , 2017, , . | | 0 |
| 41 | A Distinct Pathway for Polar Exocytosis in Plant Cell Wall Formation Â. Plant Physiology, 2016, 172, 1003-1018. | 4.8 | 61 |
| 42 | Multicolor 4D Fluorescence Microscopy using Ultrathin Bessel Light Sheets. Scientific Reports, 2016, 6, 26159. | 3.3 | 48 |
| 43 | ATM protein is located on presynaptic vesicles and its deficit leads to failures in synaptic plasticity. Journal of Neurophysiology, 2016, 116, 201-209. | 1.8 | 22 |
| 44 | Narrowband biphoton generation in the group delay regime. Physical Review A, 2016, 93, . | 2.5 | 29 |
| 45 | Subnatural-linewidth biphotons from a Doppler-broadened hot atomic vapour cell. Nature Communications, 2016, 7, 12783. | 12.8 | 85 |
| 46 | A Mitochondrion-Specific Photoactivatable Fluorescence Turn-Off AIE-Based Bioprobe for Localization Super-Resolution Microscope. Advanced Materials, 2016, 28, 5064-5071. | 21.0 | 166 |
| 47 | Quantum-state purity of heralded single photons produced from frequency-anticorrelated biphotons. Physical Review A, 2015, 92, . | 2.5 | 25 |
| 48 | Subwavelength transportation of light with atomic resonances. Physical Review A, 2015, 92, . | 2.5 | 8 |
| 49 | Shaping the Biphoton Temporal Waveform with Spatial Light Modulation. Physical Review Letters, 2015, 115, 193601. | 7.8 | 40 |
| 50 | Frequency-bin entanglement with tunable phase. Journal of Optics (United Kingdom), 2015, 17, 105201. | 2.2 | 1 |
| 51 | Measuring the Biphoton Temporal Wave Function with Polarization-Dependent and Time-Resolved Two-Photon Interference. Physical Review Letters, 2015, 114, 010401. | 7.8 | 38 |
| 52 | A user-friendly two-color super-resolution localization microscope. Optics Express, 2015, 23, 1879. | 3.4 | 47 |
| 53 | Narrowband biphotons with polarization-frequency-coupled entanglement. Physical Review A, 2015, 91, . | 2.5 | 20 |
| 54 | Frequency-induced phase-tunable polarization-entangled narrowband biphotons. Optica, 2015, 2, 505. | 9.3 | 8 |

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|----|--|------|-----------|
| 55 | Narrowband Biphotons: Generation, Manipulation, and Applications. Nano-optics and Nanophotonics, 2015, , 145-182. | 0.2 | 0 |
| 56 | Manipulating photon emission efficiency with local electronic states in a tunneling gap. Optics Express, 2014, 22, 8234. | 3.4 | 9 |
| 57 | Photon pairs with coherence time exceeding 1â€™%â€™%â€™%1/4s. Optica, 2014, 1, 84. | 9.3 | 57 |
| 58 | Efficiently Loading a Single Photon into a Single-Sided Fabry-Perot Cavity. Physical Review Letters, 2014, 113, 133601. | 7.8 | 46 |
| 59 | Subnatural-Linewidth Polarization-Entangled Photon Pairs with Controllable Temporal Length. Physical Review Letters, 2014, 112, 243602. | 7.8 | 46 |
| 60 | High-storage efficiency EIT-based optical memory. , 2014, , . | | 2 |
| 61 | Tuning the optical and electrical properties of hydrothermally grown ZnO nanowires by sealed post annealing treatment. Solid State Communications, 2013, 160, 41-46. | 1.9 | 12 |
| 62 | Optical Precursors. SpringerBriefs in Physics, 2013, , . | 0.7 | 2 |
| 63 | Manipulating cold atoms with off-axis rotating traps. Journal of the Korean Physical Society, 2013, 63, 938-942. | 0.7 | 0 |
| 64 | Charge Transfer: Oxygen-Assisted Charge Transfer Between ZnO Quantum Dots and Graphene (Small) Tj ETQq0 0 0 rgBT /Overlock 10 T | 10.0 | 0 |
| 65 | Oxygenâ€™Assisted Charge Transfer Between ZnO Quantum Dots and Graphene. Small, 2013, 9, 3031-3036. | 10.0 | 174 |
| 66 | Coherent Optical Memory with High Storage Efficiency and Large Fractional Delay. Physical Review Letters, 2013, 110, 083601. | 7.8 | 164 |
| 67 | Efficient direct evaporative cooling in an atom-chip magnetic trap. Physical Review A, 2013, 87, . | 2.5 | 2 |
| 68 | Differential-phase-shift quantum key distribution using heralded narrow-band single photons. Optics Express, 2013, 21, 9505. | 3.4 | 15 |
| 69 | Estimating Atomic Sizes with Raman Spectroscopy. Scientific Reports, 2013, 3, 1486. | 3.3 | 9 |
| 70 | FROZEN IODINE MOLECULES IN NANO-PORES OF ZEOLITE SINGLE CRYSTALS. Modern Physics Letters B, 2013, 27, 1330014. | 1.9 | 2 |
| 71 | Theory of Optical Precursors. SpringerBriefs in Physics, 2013, , 13-31. | 0.7 | 0 |
| 72 | Observation of Optical Precursors in Cold Atoms. SpringerBriefs in Physics, 2013, , 45-64. | 0.7 | 0 |

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|----|---|-----|-----------|
| 73 | Single-Photon Absorption and Reemission in Two-Level Cold Atoms. , 2013, , . | | 0 |
| 74 | Optical Precursor of a Single Photon. SpringerBriefs in Physics, 2013, , 65-74. | 0.7 | 0 |
| 75 | Optimal storage and retrieval of single-photon waveforms. Optics Express, 2012, 20, 24124. | 3.4 | 60 |
| 76 | Effective control of photoluminescence from ZnO nanowires by a-SiN _x :H decoration. Optics Letters, 2012, 37, 211. | 3.3 | 3 |
| 77 | A dark-line two-dimensional magneto-optical trap of 85Rb atoms with high optical depth. Review of Scientific Instruments, 2012, 83, 073102. | 1.3 | 57 |
| 78 | Two-photon interferences with degenerate and nondegenerate paired photons. Physical Review A, 2012, 85, . | 2.5 | 31 |
| 79 | Piezotronic Effects on the Optical Properties of ZnO Nanowires. Nano Letters, 2012, 12, 5802-5807. | 9.1 | 73 |
| 80 | Narrowband photon pair generation and waveform reshaping. Frontiers of Physics, 2012, 7, 494-503. | 5.0 | 6 |
| 81 | Coherent Control of Single-Photon Absorption and Reemission in a Two-Level Atomic Ensemble. Physical Review Letters, 2012, 109, 263601. | 7.8 | 57 |
| 82 | Reversible Control of the Orientation of Iodine Molecules inside the AlPO ₄ -11 Crystals. Journal of Physical Chemistry C, 2012, 116, 4423-4430. | 3.1 | 21 |
| 83 | Raman spectroscopy of iodine molecules trapped in zeolite crystals. Applied Physics Letters, 2011, 98, . | 3.3 | 24 |
| 84 | Optical Precursor of a Single Photon. Physical Review Letters, 2011, 106, 243602. | 7.8 | 56 |
| 85 | Electro-optical tunable time delay and advance in a silicon feedback-microring resonator. Optics Letters, 2011, 36, 1278. | 3.3 | 16 |
| 86 | Optical storage with electromagnetically induced transparency in a dense cold atomic ensemble. Optics Letters, 2011, 36, 4530. | 3.3 | 57 |
| 87 | Optical Precursors in Slow and Fast Light Media. , 2011, , . | | 0 |
| 88 | Atomic magnetometer based on a double-dark-state system. Physics Letters, Section A: General, Atomic and Solid State Physics, 2011, 375, 3296-3299. | 2.1 | 2 |
| 89 | Overlapped illusion optics: a perfect lens brings a brighter feature. New Journal of Physics, 2011, 13, 023010. | 2.9 | 40 |
| 90 | Nitrogen deep acceptors in ZnO nanowires induced by ammonia plasma. Applied Physics Letters, 2011, 99, . | 3.3 | 16 |

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| 91 | Atomic-resonance-enhanced nonlinear optical frequency conversion with entangled photon pairs. Physical Review A, 2011, 83, . | 2.5 | 9 |
| 92 | Electromagnetically induced Talbot effect. Applied Physics Letters, 2011, 98, . | 3.3 | 79 |
| 93 | Generation of Narrow-Band Hyperentangled Nondegenerate Paired Photons. Physical Review Letters, 2011, 106, 033601. | 7.8 | 78 |
| 94 | Efficient Phase-Encoding Quantum Key Generation with Narrow-Band Single Photons. Chinese Physics Letters, 2011, 28, 070307. | 3.3 | 9 |
| 95 | Generation of Narrowband Hyperentangled Biphotons. , 2011, , . | | 0 |
| 96 | Improving spatial resolution in quantum imaging beyond the Rayleigh diffraction limit using multiphoton W entangled states. Physics Letters, Section A: General, Atomic and Solid State Physics, 2010, 374, 3908-3911. | 2.1 | 9 |
| 97 | Optical precursors with finite rise and fall time. Journal of Optics (United Kingdom), 2010, 12, 104010. | 2.2 | 7 |
| 98 | Optical coherent transients in cold atoms: From free-induction decay to optical precursors. Physical Review A, 2010, 81, . | 2.5 | 26 |
| 99 | Shaping Biphoton Temporal Waveforms with Modulated Classical Fields. Physical Review Letters, 2010, 104, 183604. | 7.8 | 48 |
| 100 | Stacked Optical Precursors from Amplitude and Phase Modulations. Physical Review Letters, 2010, 104, 223602. | 7.8 | 30 |
| 101 | Slow-light-induced interference with stacked optical precursors for square input pulses. Optics Letters, 2010, 35, 124. | 3.3 | 23 |
| 102 | Two-photon free-induction decay with electromagnetically induced transparency. Optics Letters, 2010, 35, 1923. | 3.3 | 2 |
| 103 | Tripartite entanglement generation via four-wave mixings: narrowband triphoton W state. Journal of the Optical Society of America B: Optical Physics, 2010, 27, A11. | 2.1 | 20 |
| 104 | Engineering biphoton wave packets with an electromagnetically induced grating. Physical Review A, 2010, 82, . | 2.5 | 34 |
| 105 | Temporally shaping biphoton wave packets with periodically modulated driving fields. Physical Review A, 2009, 79, . | 2.5 | 19 |
| 106 | Modulation and measurement of time-energy entangled photons. Physical Review A, 2009, 80, . | 2.5 | 35 |
| 107 | Three-wire magnetic trap for direct forced evaporative cooling. Physical Review A, 2009, 79, . | 2.5 | 6 |
| 108 | Two-way transparency in the light-matter interaction: Optical precursors with electromagnetically induced transparency. Physical Review A, 2009, 79, . | 2.5 | 34 |

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|-----|--|-----|-----------|
| 109 | Optical Precursors with Electromagnetically Induced Transparency in Cold Atoms. Physical Review Letters, 2009, 103, 093602. | 7.8 | 75 |
| 110 | Modulation and Measurement of Time-Energy Entangled Photons. , 2009, , . | | 0 |
| 111 | Shaping Paired Photons with Four-Wave Mixing and Slow Light. , 2009, , . | | 0 |
| 112 | Narrowband Triphoton W State Generation via Four-Wave Mixings. , 2009, , . | | 0 |
| 113 | Nonclassical light generation via a four-level inverted-Y system. Physical Review A, 2008, 77, . | 2.5 | 42 |
| 114 | Electro-Optic Modulation of Single Photons. Physical Review Letters, 2008, 101, 103601. | 7.8 | 179 |
| 115 | Observation of optical precursors at the biphoton level. Optics Letters, 2008, 33, 2149. | 3.3 | 47 |
| 116 | Narrowband biphoton generation near atomic resonance. Journal of the Optical Society of America B: Optical Physics, 2008, 25, C98. | 2.1 | 132 |
| 117 | Two-photon beating experiment using biphotons generated from a two-level system. Physical Review A, 2008, 78, . | 2.5 | 7 |
| 118 | Subnatural Linewidth Biphotons with Controllable Temporal Length. Physical Review Letters, 2008, 100, 183603. | 7.8 | 171 |
| 119 | Measurement of Biphoton Wavefunctions using Fast Amplitude Modulators. , 2008, , . | | 0 |
| 120 | Far-off-resonant ring trap near the ends of optical fibers. Physical Review A, 2007, 76, . | 2.5 | 1 |
| 121 | Biphoton generation in a two-level atomic ensemble. Physical Review A, 2007, 75, . | 2.5 | 42 |
| 122 | Four-Wave Mixing and Biphoton Generation in a Two-Level System. Physical Review Letters, 2007, 98, 053601. | 7.8 | 110 |
| 123 | Four-wave mixing in three-level systems: Interference and entanglement. Physical Review A, 2007, 76, . | 2.5 | 45 |
| 124 | Spontaneous parametric down-conversion in a three-level system. Physical Review A, 2007, 76, . | 2.5 | 25 |
| 125 | Generation of Subnatural Linewidth Biphotons. , 2007, , . | | 0 |
| 126 | Four-Wave Mixing and Two-Photon Interference in a Three-Level Atomic Ensemble. , 2007, , . | | 0 |

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|-----|--|-----|-----------|
| 127 | A New Beating Experiment Using Biphotons Generated from a Two-Level System. , 2007, , . | | 0 |
| 128 | Generation of Narrow-Bandwidth Paired Photons: Use of a Single Driving Laser. Physical Review Letters, 2006, 97, 113602. | 7.8 | 142 |
| 129 | Atom-chip Bose-Einstein condensation in a portable vacuum cell. Physical Review A, 2004, 70, . | 2.5 | 93 |